DETAILED FINDINGS

* Internet Usage

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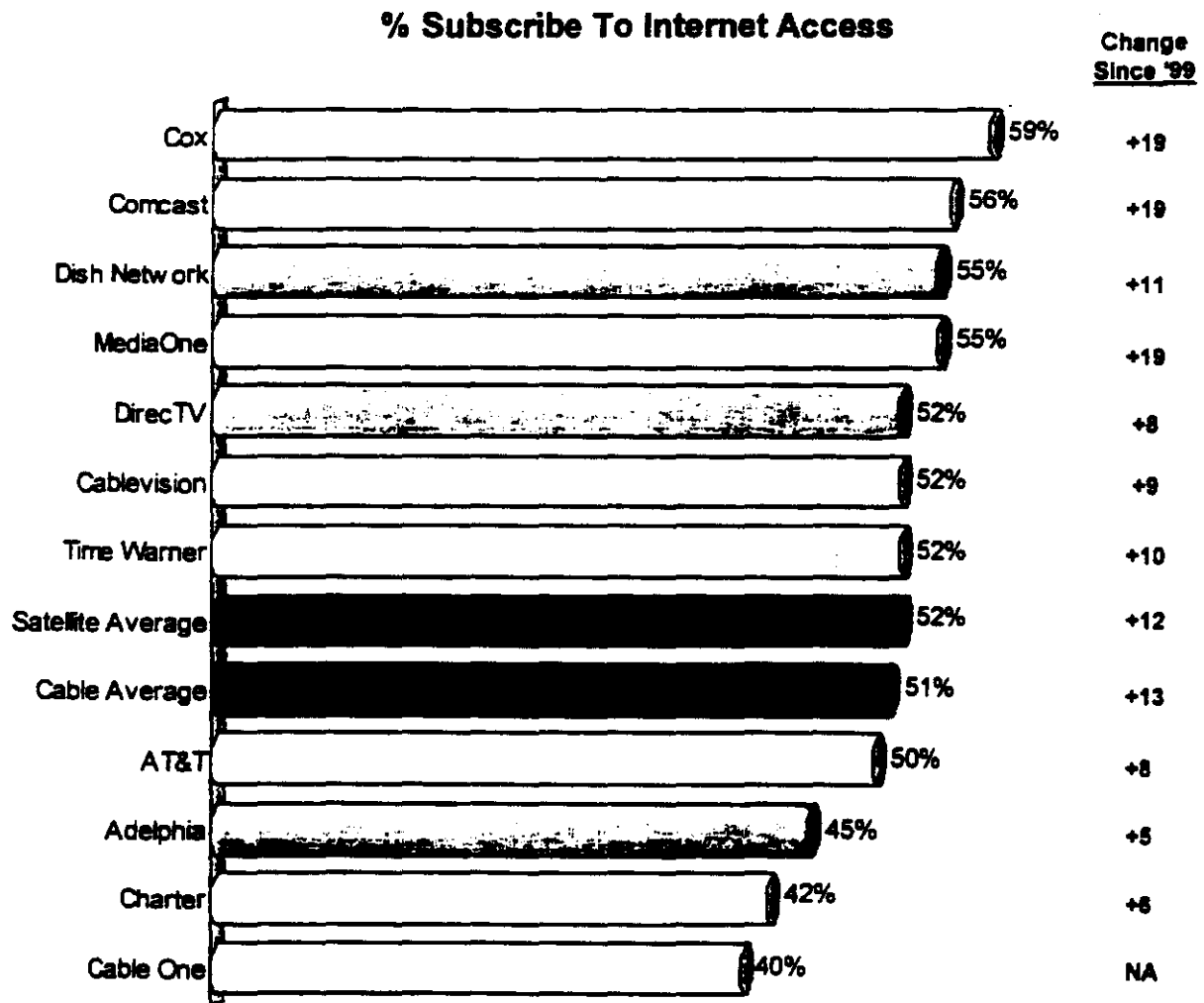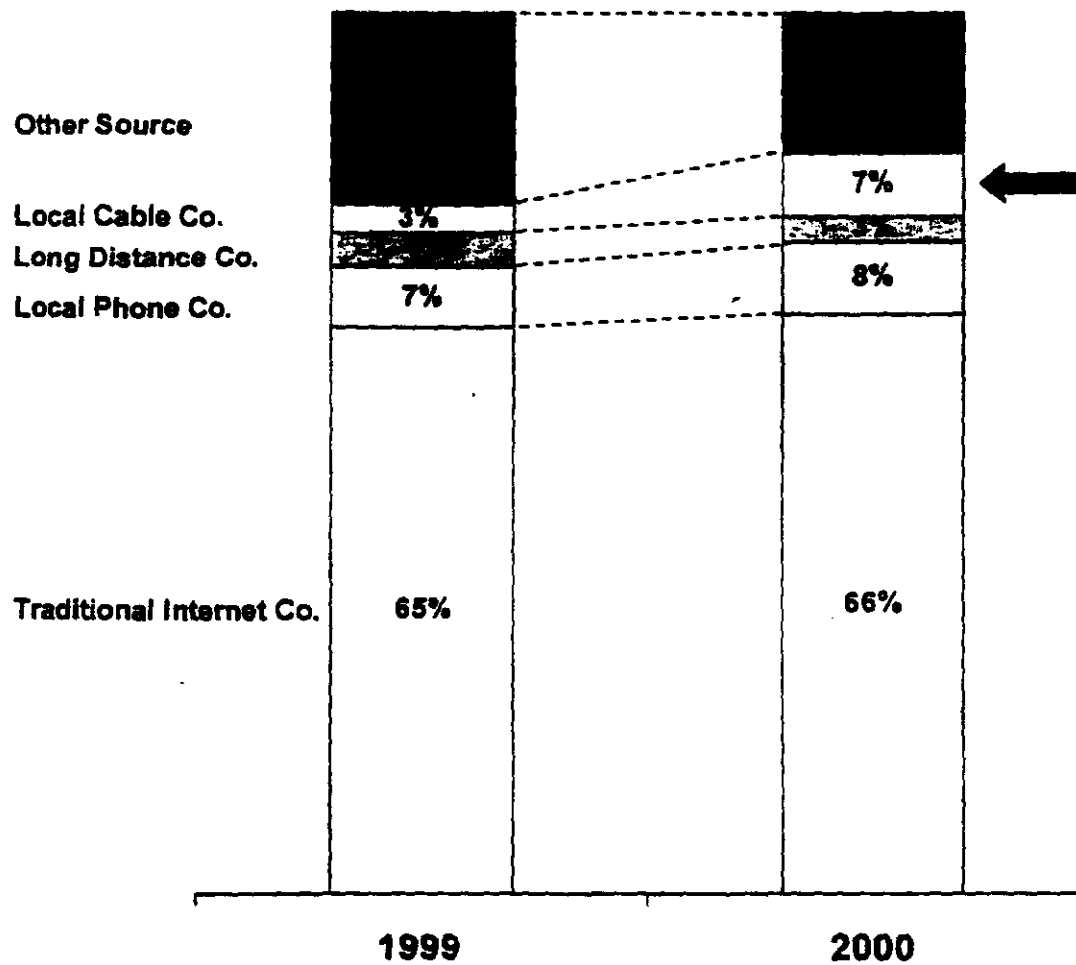
One-Half Of Cable/Satellite Households Now Have Internet Access. Cable One Reports The Lowest Cumulative Increase From 1999, Trailing Industry Leader Cox By A Significant Margin.

% Subscribe To Internet Access

Change Since '99

Provider	% Subscribe	Change Since '99
Cox	59%	+19
Comcast	56%	+19
Dish Network	55%	+11
MediaOne	55%	+19
DirecTV	52%	+8
Cablevision	52%	+9
Time Warner	52%	+10
Satellite Average	52%	+12
Cable Average	51%	+13
AT&T	50%	+8
Adelphia	45%	+5
Charter	42%	+6
Cable One	40%	NA

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On Average, 7% Of Cable Households Subscribe To High-Speed Access From Their Cable Company, Doubling The Penetration Level From 1999 (3%).

% Source of Internet Access: Cable HH

Other Source

Local Cable Co. 3% 7%

Long Distance Co.

Local Phone Co. 7% 8%

Traditional Internet Co. 65% 66%

1999 2000

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Cable Modem Users Tend To Have Higher Household Incomes, Live In Larger Households And In Suburban Regions.

Cable Modem Vs. Traditional Internet Connection Demographic Differences

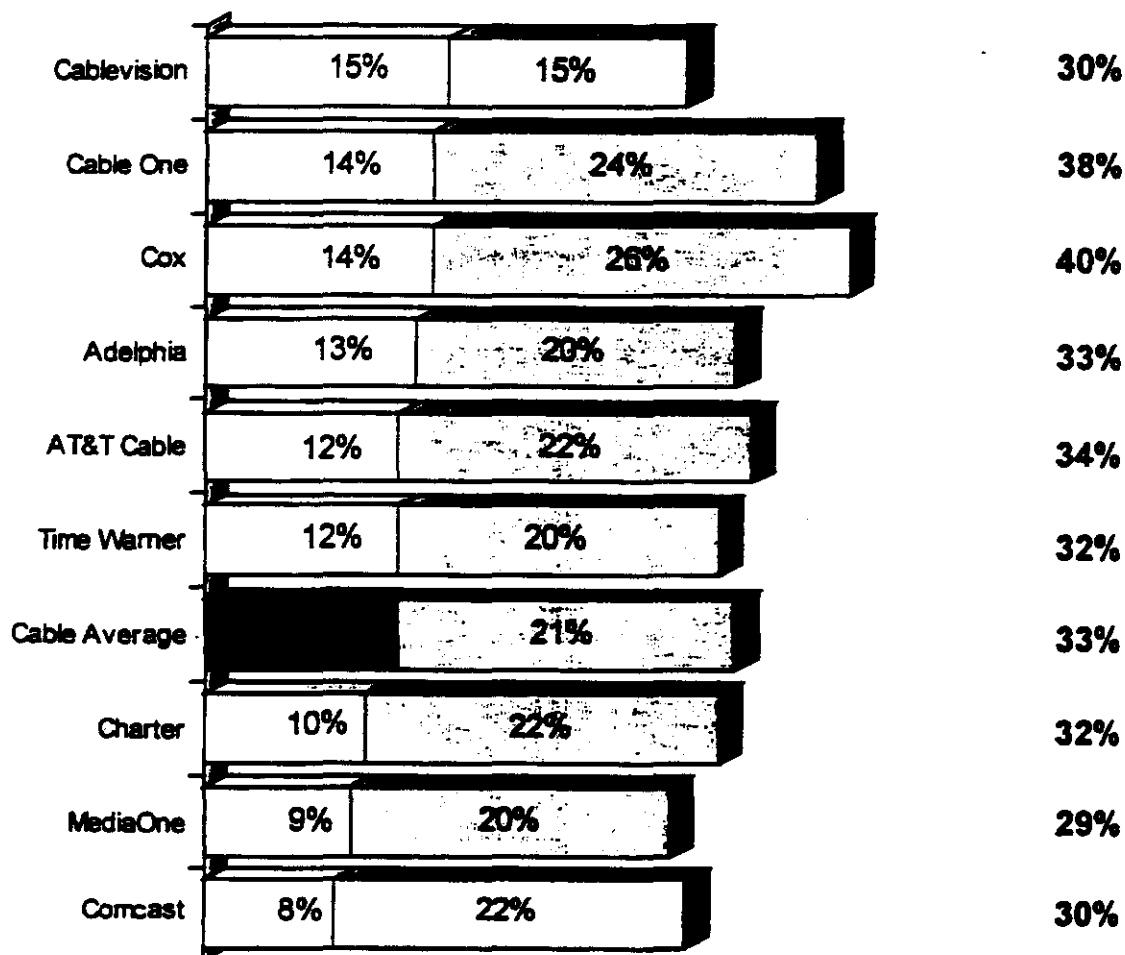|	Cable Modem Households	Traditional Internet Connection Households	% Diff. Cable Modem vs. Traditional Modem
Age			
Under 35	19%	24%	-5
35-54	65%	48%	+16
55+	16%	27%	-11
Education			
High School or less	25%	28%	-3
College+	75%	72%	+3
Income (in HH)			
Less than $35,000	20%	28%	-8
$35K to $50K	28%	19%	+9
$50K or more	52%	53%	-1
Mean per year (000's)	$71.1	$61.9	+$9.2
Household Size			
One	12%	17%	-5
Two	27%	35%	-8
Three+	61%	48%	+13
Residential Location			
Urban	23%	25%	-2
Suburban	64%	53%	+11
Rural	13%	22%	-9

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Cable Modem Users Are Significantly More Satisfied With Their Cable Companies Than Subscribers That Use A Traditional Internet Connection.

Cable Modem Vs. Traditional Internet Connection Satisfaction Index

	Cable Modem	Traditional Internet Connection	Difference
OVERALL	102	97	+5
Cost of Service	99	96	+3
Credibility/Billing	101	97	+4
Program Offerings	106	97	+9
Equipment & Service Capabilities	105	98	+7
Customer Service	102	99	+3
Reception Quality	106	99	+7

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However, If High-Speed Internet Access For Approximately $45/Month Were Available In The Next Year, About One In Three Cable Households Would Consider It.

**% Extremely/Very/Somewhat Likely
To Subscribe To Internet Access With Local Cable Company:
Next 12 Months If High-Speed Access Offered***

	Extremely/Very	Somewhat	Total
Cablevision	15%	15%	30%
Cable One	14%	24%	38%
Cox	14%	26%	40%
Adelphia	13%	20%	33%
AT&T Cable	12%	22%	34%
Time Warner	12%	20%	32%
Cable Average		21%	33%
Charter	10%	22%	32%
MediaOne	9%	20%	29%
Comcast	8%	22%	30%

□ Extremely/Very □ Somewhat

* Among these households with dial-up Internet service only

Source: 2000 JDP&A Cable/Satellite CSI Study   88   Copyright 2000

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DETAILED FINDINGS

* Web-Based Customer Service Issues

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More Than Twice The Percentage Of Satellite Households Report Visiting Their Provider's Website Versus Cable Subscribers. One In Five Households Have Visited Dish Network's Website In The Past 6 Months.

% With Internet Access Who Have Visited Their Satellite/Cable Providers Website In Past 6 Months:
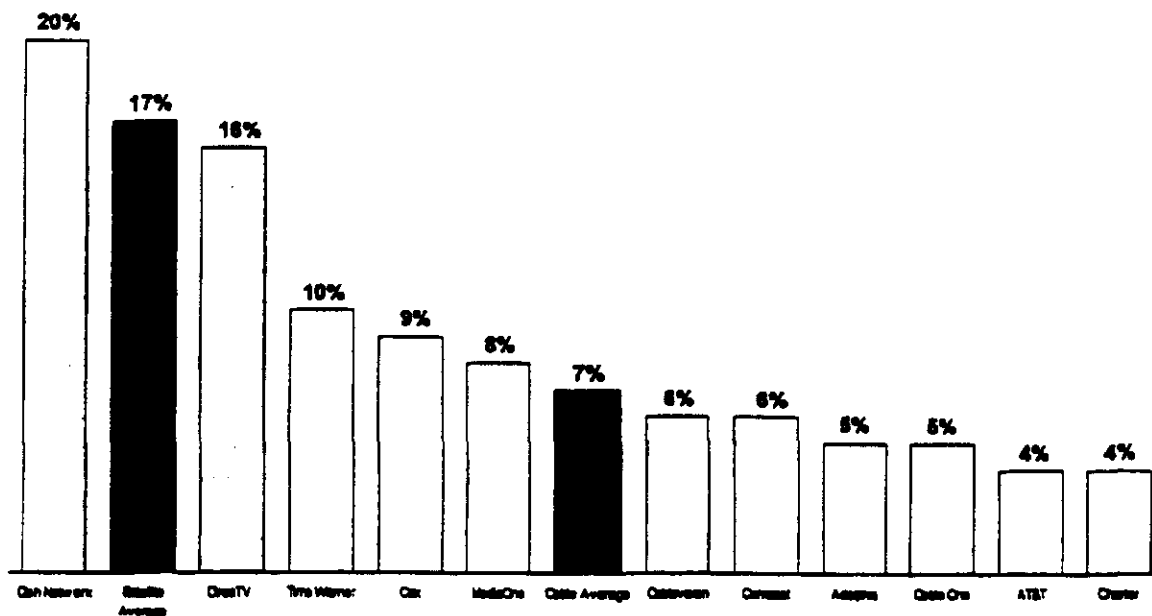
Information On Additional Services Is The Reason For Three-Quarters Of The Visits To Both Cable And Satellite Carrier Websites.

% Reasons For Visiting Cable/Satellite Provider Website*

Information On Additional Services
- 73%
- 80%

Contact Customer Service
- 21%
- 14%

Review A Bill
- 18%
- 9%

Pay Bill
- 3%
- 2%
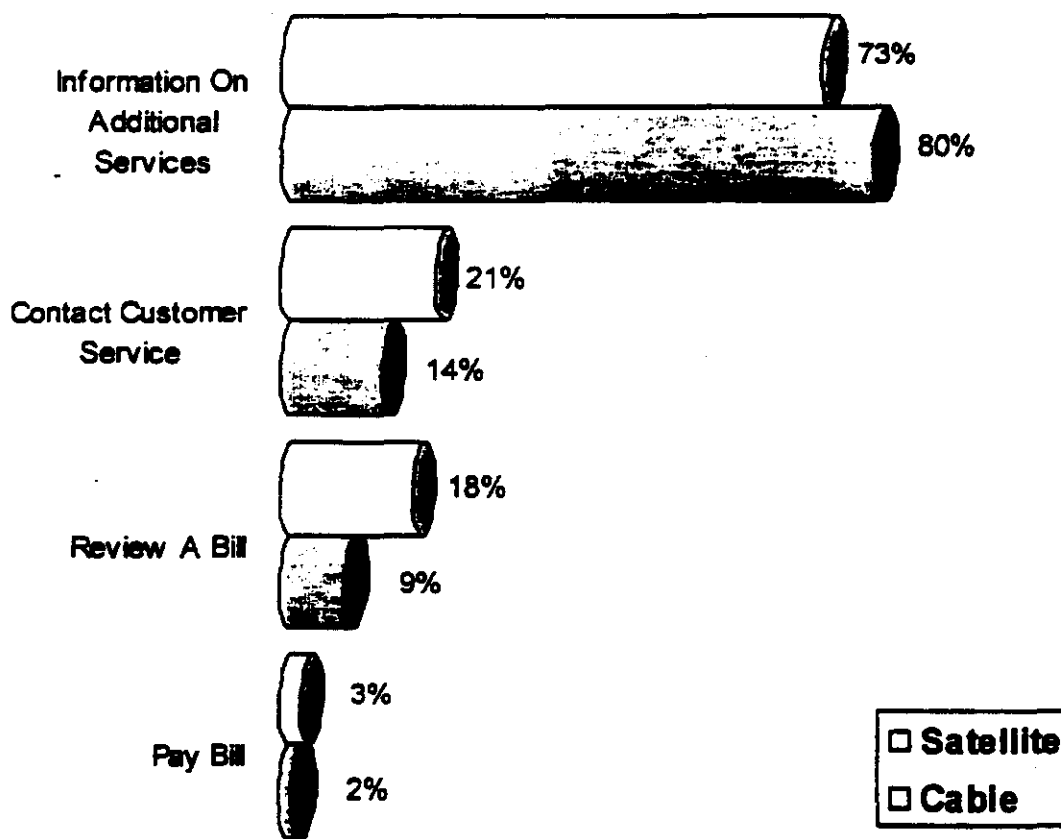
☐ Satellite
☐ Cable

* Among those who visited Cable/Satellite TV provider's website in past 6 months.

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Satellite Users Report Much Higher Levels Of Satisfaction With Their Providers Website Than Do Cable Users.

%"Extremely/Very Satisfied" With Satellite/Cable Providers Website:
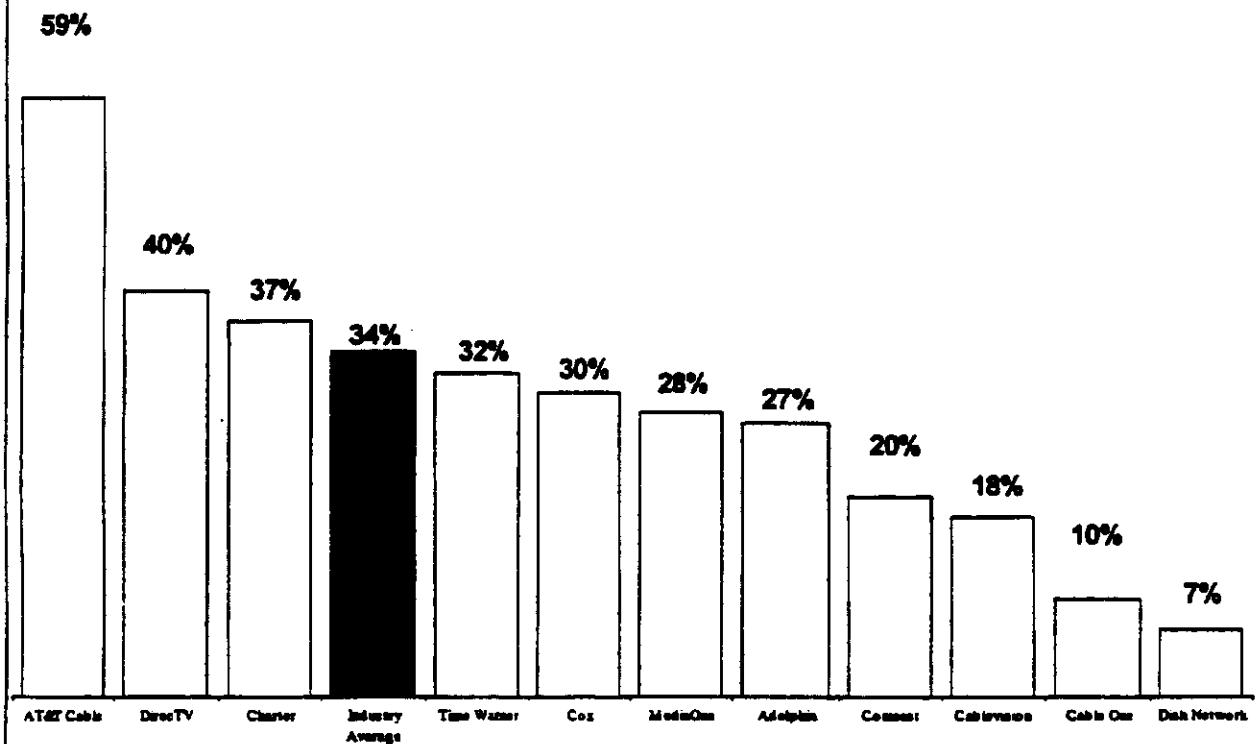
45%

28%

Satellite   **Cable**

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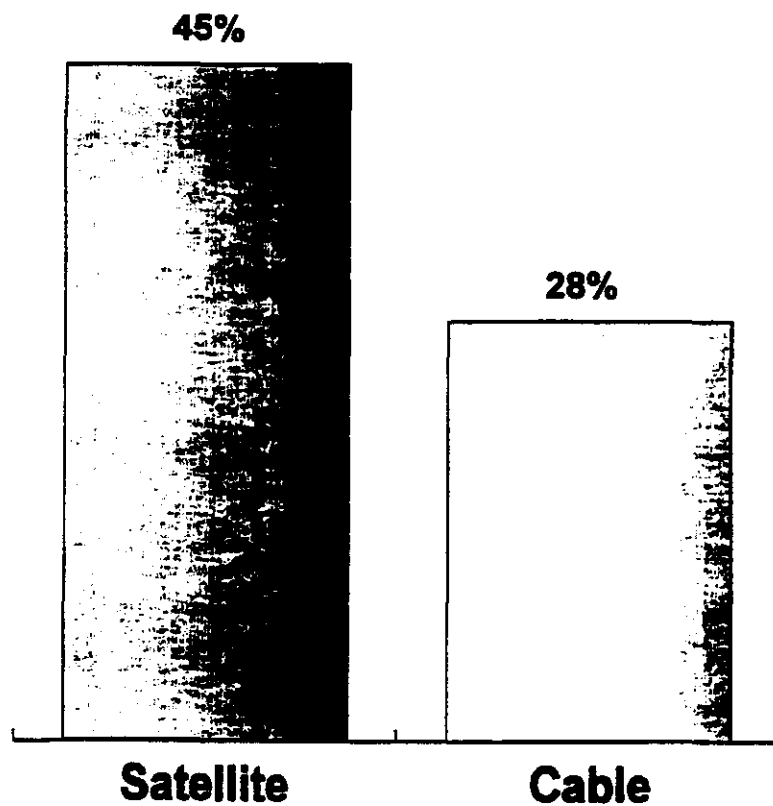
DETAILED FINDINGS

* Impact Of Merger Activity

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Household Awareness Of Mergers Among The Different Cable/Satellite Companies Differs From Company To Company. AT&T Cable Has The Highest Awareness Level.
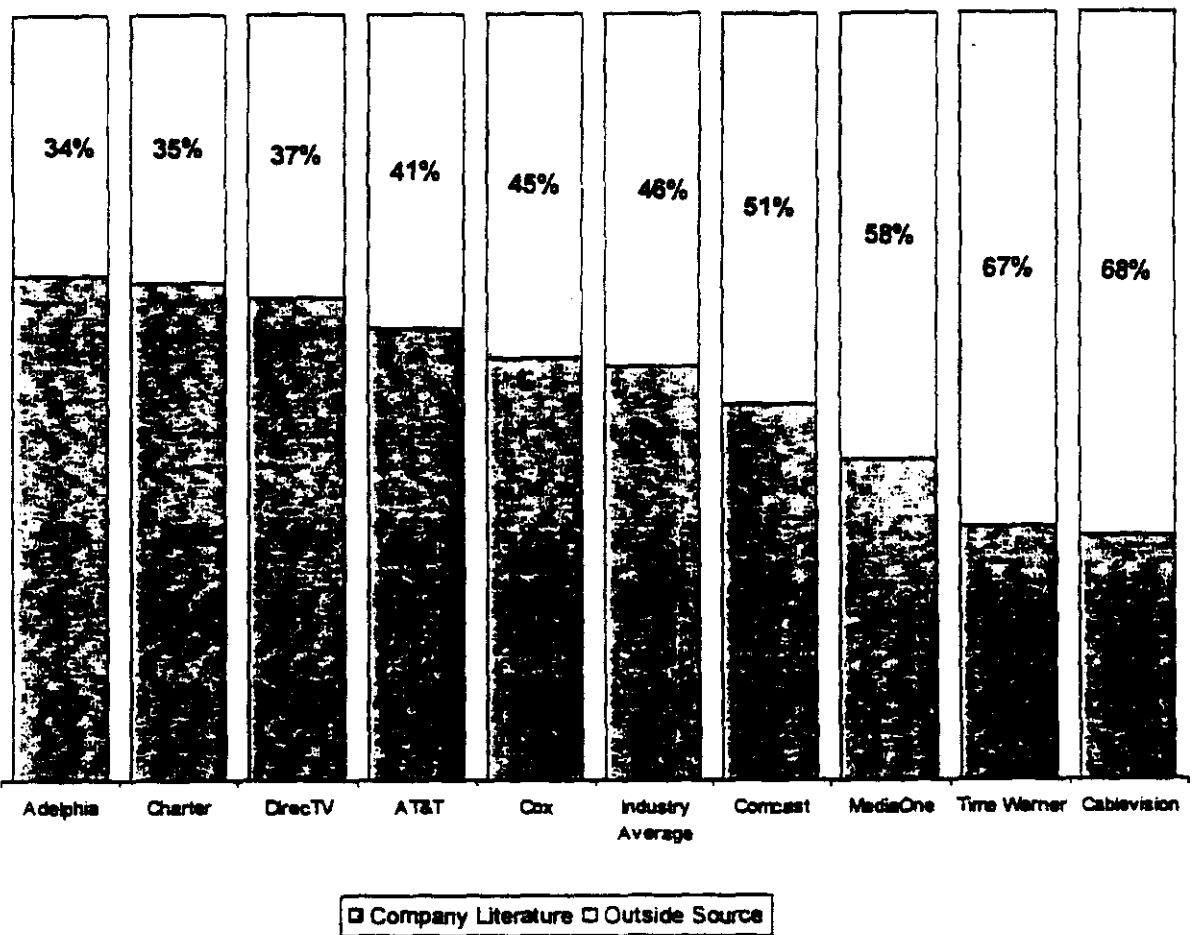
% Of HH's Who Report Being Aware Of Cable/Satellite Provider Experiencing A Merger:

AT&T Cable	DirecTV	Charter	Industry Average	Time Warner	Cox	MediaOne	Adelphia	Comcast	Cablevision	Cable One	Dish Network
59%	40%	37%	34%	32%	30%	28%	27%	20%	18%	10%	7%

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Adelphia And Charter Customers Are Most Likely To Find Out About Mergers Through Corporate Literature.

Manner In Which Household Became Aware Of Service*:

34%	35%	37%	41%	45%	46%	51%	58%	67%	68%
Adelphia	Charter	DirecTV	AT&T	Cox	Industry Average	Comcast	MediaOne	Time Warner	Cablevision

□ Company Literature □ Outside Source

Source: 2000 JDP&A Cable/Satellite CSI Study   95   Copyright 2000

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With The Exception Of DirecTV, The Majority Of Households Report Noticing No Change In Cable Or Satellite Service As A Result Of Recent Mergers. DirecTV Customers Report Higher Levels Of Positive Change Than Any Other Provider.

% Change In Cable/Satellite Service As A Result Of Merger*:

Provider	Positive Change	Negative Change	No Change
DirecTV	16%		60%
MediaOne	10%		74%
Charter	10%		76%
Comcast	6%		80%
Cox	5%		81%
Industry Average	9%		77%
AT&T Cable	9%		79%
Adelphia	8%		80%
Cablevision	16%		74%
Time Warner	8%		85%

☐ Positive Change ☐ Negative Change ☐ No Change
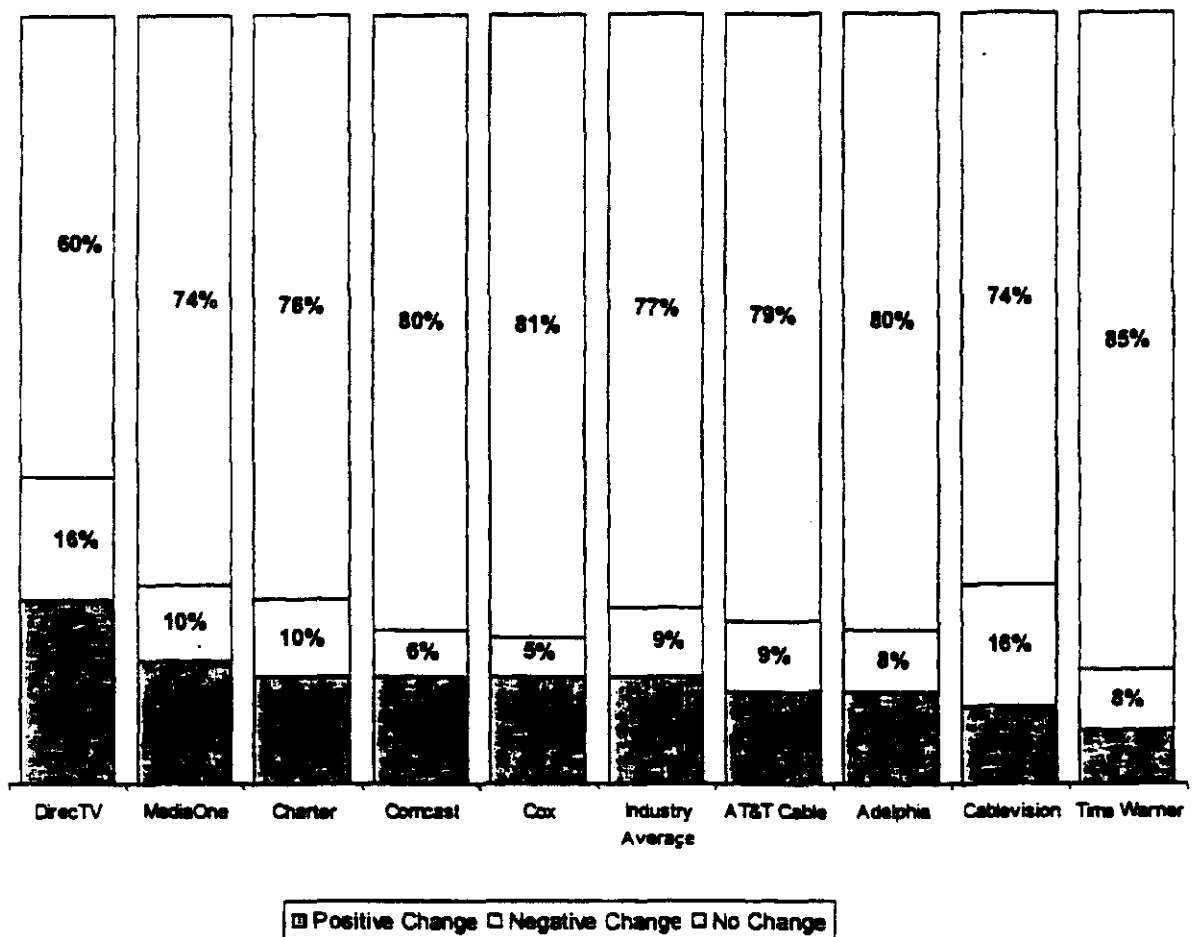
* Excluded: Cable One and Dish Network due to insufficient sample size.

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Appendix

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Customer Satisfaction

Measurement Process

The J.D. Power And Associates Customer Satisfaction Index Is Developed From A Three Step Methodology

Battery Of Customer Satisfaction Questions

↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓

1. Factor Analysis

Data Reduction

↓ ↓ ↓ ↓ ↓ ↓

Factors/ Dimensions Of Satisfaction

- Cost of Service • Credibility/Billing
- Program Offerings • Equipment & Service Capabilities
- Customer Service • Reception Quality

↓ ↓ ↓ ↓ ↓ ↓

2. Regression Analysis

Establish Importance Of Factors Relative To Overall Satisfaction

↓

3. Assemble Index

Combine Weights & Factor Scores Of Respondents

↓

INDEX

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Example Of How The J.D. Power And Associates' Customer Satisfaction Index Is Calculated

Step 1. Factor Analysis

Attribute Example	Specific Question	Factors Identified
"How satisfied are you with cable/satellite TV service?"	Attribute 1	Factor 1
	Attribute 2	
	Attribute 3	Factor 2
	Attribute 4	
	Attribute 5	Factor 3
	Attribute 6	

Respondents answer a battery of specific satisfaction attribute questions measuring satisfaction level

Like attributes then are grouped into unique factors or dimensions using a technique called factor analysis

Example Of How The J.D. Power And Associates' Customer Satisfaction Index Is Calculated

<div style="border:1px solid black;">

Step 2. Calculating Attribute Scores

</div>

Attribute 1

"Has knowledgeable customer service representatives"

Excellent =	5
Very Good =	4
Good =	(3)
Fair =	2
Poor =	1

Respondent's Score

Respondent's answer is converted into a numeric value

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Example Of How The J.D. Power And Associates' Customer Satisfaction Index Is Calculated

Step 2. Calculating Attribute Scores

Respondents attribute score for attribute 1: 4

Mean score of all respondents for attribute 1: 3.8

Standard Deviation: .3

Scaling Factor: 10

Calculation of respondent's attribute 1 score:
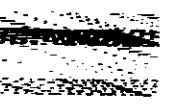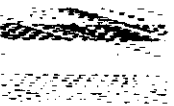
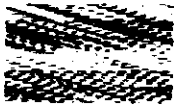$$\frac{4 - 3.8}{.3} \ X \ 10 + 100 = 107$$

Each respondent's score for a given attribute is then averaged together
The Standard Deviation is computed
A Scaling Factor is determined
Respondent's score for that attribute is calculated
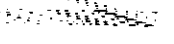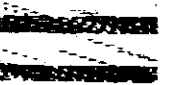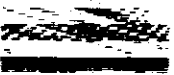
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Example Of How The J.D. Power And Associates' Customer Satisfaction Index Is Calculated

Step 4. Calculating Factor Scores

	Attribute Score	Attribute Weight

Calculation Of Respondent's Attribute 1 Score:

$$\frac{4 - 3.8}{.3} \times 10 + 100 = 107 \quad X \quad .2 = 21$$

Calculation Of Respondent's Attribute 2 Score:

$$\frac{3.9 - 3.8}{.3} \times 10 + 100 = 103 \quad X \quad .3 = 31$$

Calculation Of Respondent's Attribute 2 Score:

$$\frac{4 - 3.8}{.3} \times 10 + 100 = 107 \quad X \quad .5 = 54$$

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Respondent's Factor Score

Index scores are then calculated for each attribute in that factor

Attribute weights are applied

Attribute index score are multiplied by the weights and a respondent's factor score is arrived at

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Example Of How The J.D. Power And Associates' Customer Satisfaction Index Is Calculated

Step 5. Calculating The Overall Satisfaction Index

Factor 1	Weight 1		Factor 2	Weight 2		Factor 3	Weight 3		Overall Satisfaction Score
(106	X .3)	+	(105	X .4)	+	(96	X .3)	=	103

An overall satisfaction index score is then calculated by applying the respective factor weight to each respondent's factor score

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The J.D. Power And Associates Approach For Analyzing Customer Satisfaction Is To Examine The Three Levels Of Measurements Built Into The Index

INDEX

↓

1. *Examine <u>Overall Index Score</u> Relative To Competition*
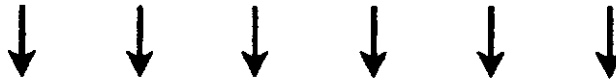
↓

Factors/ Dimensions Of Satisfaction

- Cost of Service • Credibility/Billing
- Program Offerings • Equipment & Service Capabilities
- Customer Service • Reception Quality

↓ ↓ ↓ ↓ ↓ ↓

2. *Examine <u>Factor Scores</u> And Importance Of Factors Relative To Overall Satisfaction*

↓ ↓ ↓ ↓ ↓ ↓

Question Answers Converted To Attribute Index Scores

↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓

3. *For Each Factor, Examine <u>Attribute Index Scores</u> (Which <u>Add</u> To The Respondents' Factor Score)*

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Sample And Methodology

2000 Syndicated Residential Cable/Satellite TV Customer Satisfaction Study

✦ Sample And Methodology ✦

The study was conducted in two phases as follows:

Phase I

A screener was mailed to a total sample of 200,000 households, randomly selected from the NPD Consumer Panel* of approximately 330,000 households. The key objectives of the screener were to:

Establish cable/satellite TV usage, and;

Identify the primary provider of cable and/or satellite TV service.

A total of 131,401 usable screeners were returned.

Phase II

A twelve-page mail questionnaire was sent to a randomly selected sample of consumers who indicated that they had cable and/or satellite TV service. The sample was defined as follows:

An overall sample of 6,505 households was selected. This sample was divided into 12 groups, based on cable or satellite carrier. A random sample of 500 respondents per group was selected to be included in this phase.

Each group of households was balanced demographically to represent the universe of each carrier as defined by the screener. Questionnaires were mailed in late March, 2000 and were addressed to the key decision-maker responsible for selecting the cable or satellite TV service carrier in the household. Each returned questionnaire was validated for completeness, correct carrier and decision-maker names. A total of 4,883 usable questionnaires were received when the field closed at the end of May,1999, representing a response rate of 75%.

* see page A&R 1 in the "Analysis & Reporting" section for more details on panel

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2000 Syndicated Residential Cable/Satellite TV Customer Satisfaction Study

✦ Sample And Methodology ✦

Questionnaire Contents:

The questionnaire with accompanying cover letter was sent to each household in the sample and included the following topics:

- Overall Opinion of Cable/Satellite TV Provider

- Customer Satisfaction With Cable/Satellite TV Providers On 40 Attributes

- Cable/Satellite TV Switching Behavior

- Satisfaction With Customer Service Experience

- Evaluation of Digital TV Usage

- Evaluation of Internet Usage

- Evaluation of Current Cable/Satellite TV Provider Website

- Bundling Services

- Demographic Characteristics/Incidence

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Analysis And Reporting

2000 Syndicated Residential Cable/Satellite TV Customer Satisfaction Study

✦ Analysis And Reporting ✦

Balancing of Household Profile

The NPD Consumer Panel, from which the sample was drawn, consists of approximately 330,000 households. Within this household universe, a continuous maintenance program is maintained to yield a nationally representative return sample. This panel is balanced on six demographic, socio-economic and geographic variables to reflect total U.S. household composition. These six variables include:

- Household size
- Household income
- Age of householder
- Socio-economic status
- Education of householder
- Region and market size

Research has shown that each of the above variables has been identified as being significant societal segments that drive consumer behavior. By establishing these criteria, the returns and responses from the panel are not subject to bias by under-representing or over-representing a specific target group such as single householders, which tend to have a lower response rate. The balancing targets are based upon statistical packages using data from the Current Population Survey of the U.S. Census Bureau.

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2000 Syndicated Residential Cable/Satellite TV Customer Satisfaction Study

◆ Analysis And Reporting ◆

<u>Weighting of Data:</u>

The data in this study has been weighted to reflect the 80 million households* who subscribe to cable or satellite TV service, as well as the percentage shares of each carrier, as obtained in the screener. The percentage shares are detailed below:

Cable Carriers		Satellite Carriers	
	<u>%</u>		<u>%</u>
Adelphia	7.4	DirecTV	49.5
AT&T Cable	18.3	Primestar By DirecTV	27.3
Cablevision	6.7	Dish Network	11.1
Cable One	1.5	Other	12.1
Charter	7.9		
Comcast	9.5		
Cox	10.4		
MediaOne	5.7		
Time Warner	16.6		
Other	16.0		

* Source: Federal Communications Commission

2000 Syndicated Residential Cable/Satellite TV Customer Satisfaction Study

✦ Analysis And Reporting ✦

Customer Satisfaction Index (CSI):

While the survey covers many areas, an overall index of critical satisfaction components has been constructed for the cable/satellite industry to simplify the review of the information. This Customer Satisfaction Index (CSI) provides a single objective measure by which cable/satellite companies can judge customer satisfaction among their customers particularly relative to competition. A total of 40 attributes were used to obtain the overall index for cable/satellite service. These attributes, along with the relative weights associated with each attribute, were selected via factor analysis and represent a balanced synthesis of customer experiences.

The Customer Satisfaction Index is a synopsis of the data collected through the Syndicated Cable/Satellite Study and is a measurement of relative levels of residential consumer satisfaction. For cable/satellite service, the CSI is based on six related factors. These factors are Cost of Service, Credibility/Billing, Program Offerings, Customer Service, Equipment & Service Capabilities and Reception Quality.

CSI Weighting

Response Weighting: The traditional industry approach of assigning values to responses is used in the first weighting stage of the index. Rating scales are assigned positive values for each point. In this study, a five point scale with excellent to poor ratings have the following values assigned:

- Excellent = 5
- Very Good = 4
- Good = 3
- Fair = 2
- Poor = 1

2000 Syndicated Residential Cable/Satellite TV Customer Satisfaction Study

✦ Analysis And Reporting ✦

Relative Question Weighting: Once values are assigned to responses within a question, the relative importance of each question is determined using factor analysis. Factor analysis is employed as the first step because the original attributes used are not independent of each other. In other words, an individual's experience and response to one question can clearly be affected by an experience and response to another question. For example, there are several attributes in the survey that are address the cost of service. There are also some that are related to billing -- a closely related concept. The issue of how much weight the cost of service and billing concepts should have in the CSI, and how many variables or components it should contain, is determined using factor analysis.

Sometimes not all variables are ultimately included in this type of analysis. Often variables are deleted from the factor analysis procedure for one or more of the following reasons:

- The question yields a low level customer response. As such, the sample size is not large enough to measure customer satisfaction.

    The question shows no significant variation across carriers.

- The question bears little or no relationship to the other variables.

As a result, below are the six factors detailed below.

* The first factor (Cost of Service) is derived from five variables all highly correlated on some aspect of the cost of cable/satellite TV service

* The second factor (Credibility/Billing) is derived from eleven variables all highly correlated on the aspect of the companies' reputation, billing practices and honesty.

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1999 Syndicated Residential Cable/Satellite TV Customer Satisfaction Study

✦ Analysis And Reporting ✦

* The third factor (Program Offerings) is comprised of seven variables, which are all highly correlated on some aspect of cable/satellite TV programming

* The fourth factor (Equipment & Service Capabilities) is comprised of five variables, which are highly correlated with equipment and installation issues

* The fifth factor (Customer Service) is comprised of ten variables, which are highly correlated on the aspects of the customer service reps and their timeliness

* The sixth factor (Reception Quality) is comprised of two variables, which are highly correlated on the aspects of picture and sound quality

The attributes are summarized into the six factors based on the results of the factor analysis. Any indexed factor score for a carrier overall above 105 is considered significantly above, while a 95 or lower is considered significantly below the industry average in the 2000 study. By using indexed data, priorities can be readily set in exploiting positive areas and eliminating potential weaknesses versus the competition.